



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

June 19, 2003

RE: *Cargill AgHorizons*
TO: Interested Parties / Applicant

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

SPR 127-16957-00025

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

FNPER.wpd 8/21/02



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

June 19, 2003

Jim Simpson
Cargill AgHorizons
6640 Ship Drive, Port of Indiana
Portage, Indiana 46368

Re: **127-16957-00025**
First Significant Revision to
FESOP F 127-11201-00025

Dear Mr. Simpson:

Cargill AgHorizons (Cargill, Inc.) was issued a permit on July 6, 2000 for a grain elevator. A letter requesting changes to this permit was received on December 23, 2002. Pursuant to the provisions of 326 IAC 2-8-11.1(f)(1), a Significant Permit Revision to this permit is hereby approved as described in the attached Technical Support Document.

This revision consists of:

- (a) Changing the name of the source from Cargill, Inc. to Cargill AgHorizons.
- (b) Reducing the throughput limitation of the two (2) grain dryers, DR41 and DR43, from 29.5 to 5.0 million bushels of grain per year and increasing the limited PM and PM₁₀ emissions from the dryers from 24.78 to 35.0 tons of PM and PM₁₀ per year.
- (c) Eliminating the applicability of NSPS Subpart DD to the two (2) grain dryers.
- (d) Deleting the performance testing requirement for the two (2) grain dryers.
- (e) Revising the existing emission unit-specific PM and PM₁₀ annual emission limits with an overall PM and PM₁₀ emission limits and adding emission unit-specific PM and PM₁₀ emission limits to render the requirements of 326 IAC 2-2 and 326 IAC 2-7 not applicable.
- (f) Restoring the PM grain loading limitation of 0.01 grains per dry standard cubic foot of exhaust air pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD), Standards of Performance for Grain Elevators.
- (g) Noting the correct stack parameters.

There are no construction conditions applicable to the proposed revision:

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire revised FESOP, with all revisions and amendments made to it, is being provided.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Mark L. Kramer, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395, ext. 12, or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

MLK/MES

cc: File - Porter County
U.S. EPA, Region V
Porter County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Dave Sampias
Compliance Branch - Karen Nowak
Administrative and Development - Lisa Lawrence
Technical Support and Modeling - Michele Boner

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR QUALITY**

**Cargill AgHorizons
Burns Waterway Harbor
Portage, IN 46368**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 127-11201-00025	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 6, 2000 Expiration Date: July 6, 2005

1st Reopening No.: 127-13095, issued on September 21, 2001

1st Administrative Amendment No.: 127-15038, issued on November 27, 2001

2nd Administrative Amendment No.: 127-15685, issued on April 18, 2002

1st Significant Permit Revision No: 127-16957-00094	Conditions Affected: A.2 and C.1 Sections Affected: D.1 through D.7 & Forms
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: June 19, 2003

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-8-3(b)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]
- A.4 FESOP Applicability [326 IAC 2-8-2]
- A.5 Prior Permit Conditions

SECTION B GENERAL CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions [326 IAC 2-8-1]
- B.3 Permit Term [326 IAC 2-8-4(2)]
- B.4 Enforceability [326 IAC 2-8-6]
- B.5 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3 (h)]
- B.6 Severability [326 IAC 2-8-4(4)]
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]
- B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]
- B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
- B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)]
- B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
- B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]
- B.14 Emergency Provisions [326 IAC 2-8-12]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
- B.17 Permit Renewal [326 IAC 2-8-3(h)]
- B.18 Permit Amendment or Modification [326 IAC 2-8-10][326 IAC 2-8-11.1]
- B.19 Operational Flexibility [326 IAC 2-8-15]
- B.20 Construction Permit Requirement [326 IAC 2]
- B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)]
- B.22 Transfer of Ownership or Operation [326 IAC 2-8-10]
- B.23 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

SECTION C SOURCE OPERATION CONDITIONS

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

- C.1 Overall Source Limit [326 IAC 2-8]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
- C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

Testing Requirements [326 IAC 2-8-4(3)]

- C.9 Performance Testing [326 IAC 3-6]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.11 Monitoring Methods [326 IAC 3]
- C.12 Pressure Gauge Specifications

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]
- C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4]
- C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

- C.16 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]
- C.17 Monitoring Data Availability
- C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

Stratospheric Ozone Protection

- C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS System #1

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.1.1 326 IAC 12 (40 CFR 60.302, Subpart DD)
- D.1.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]
- D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.1.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.1.6 Control Device Required for Particulate Matter (PM)
- D.1.7 Visible Emissions Notations
- D.1.8 Parametric Monitoring
- D.1.9 Control Device Inspections

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

- D.1.10 Record Keeping Requirements
- D.1.11 Reporting Requirements

SECTION D.2 FACILITY OPERATION CONDITIONS System #2

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.2.1 326 IAC 12 (40 CFR 60.302, Subpart DD)
- D.2.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]
- D.2.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.2.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.2.6 Control Device Required for Particulate Matter (PM)
- D.2.7 Visible Emissions Notations
- D.2.8 Parametric Monitoring
- D.2.9 Control Device Inspections

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.10 Record Keeping Requirements

D.2.11 Reporting Requirements

SECTION D.3 FACILITY OPERATION CONDITIONS System #3

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

D.3.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

D.3.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

D.3.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.3.6 Control Device Required for Particulate Matter (PM)

D.3.7 Visible Emissions Notations

D.3.8 Parametric Monitoring

D.3.9 Control Device Inspections

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.10 Record Keeping Requirements

D.3.11 Reporting Requirements

SECTION D.4 FACILITY OPERATION CONDITIONS - System #4

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

D.4.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

D.4.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

D.4.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

D.4.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.4.6 Control Device Required for Particulate Matter (PM)

D.4.7 Visible Emissions Notations

D.4.8 Parametric Monitoring

D.4.9 Control Device Inspections

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.4.10 Record Keeping Requirements

D.4.11 Reporting Requirements

SECTION D.5 FACILITY OPERATION CONDITIONS System #5

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.5.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

D.5.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

SECTION D.6 FACILITY OPERATION CONDITIONS Grain Dryers DR41 and DR43

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.6.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]
- D.6.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.6.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.6.4 Self Cleaning Screen Required for Particulate Matter (PM)
- D.6.5 Visible Emissions Notations
- D.6.6 Self Cleaning Screens Inspections

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

- D.6.7 Record Keeping Requirements
- D.6.8 Reporting Requirements

SECTION D.7 FACILITY OPERATION CONDITIONS Open Grain Storage Pile

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.7.1 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

Compliance Determination Requirements

- D.7.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

- D.7.3 Record Keeping Requirements
- D.7.4 Reporting Requirements

Certification Form

Emergency/Deviation Form

Compliance Monitoring Report Forms

Quarterly Report Form

Intentionally Left Blank

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a grain elevator.

Authorized individual: Mr. Jim Simpson
Source Address: Burns Waterway Harbor, Portage, IN 46368
Mailing Address: 6640 Ship Drive, Port of Indiana, Portage, IN 46368
Phone Number: 219-787-5704
SIC Code: 5153
County Location: Porter
County Status: Nonattainment for ozone
Attainment for all other criteria pollutants
Source Status: Federally Enforceable State Operating Permit (FESOP)
Minor Source, under PSD or Emission Offset Rules;

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This source consists of the following emission units and pollution control devices:

A grain elevator consisting of:

- (a) Two (2) truck dumps, one (1) rail car dump, and one (1) rail loadout, all referred to as System #1, controlled by baghouse DS61 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 61.
- (b) Leg intakes (#L-30, L-31, L-33, L-34 & L-35), conveyor intake (#BC-226), conveyor intake & discharge (#BC-204), conveyor intake (#BC-225) & discharge (#BC-205), and conveyor intake (#BC-203), all referred to as System #2, controlled by baghouse DS62 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 62.
- (c) Leg elevator intake (#L-32), distributor heads (#TH-1, TH-3, TH-8 & TH-9), conveyors to silo (#BC-208 & #BC-209), conveyor to steel bin (#BC-213), three (3) surge hoppers, and weigh hopper (#S-14), all referred to as System #3, controlled by baghouse DS63 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 63.
- (d) The Peco loading system and ship loading, all referred to as System #4, controlled by baghouse DS65 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 65.
- (e) Pneumatic dust handling system, referred to as System #5, controlled by baghouse DS64 rated at 99.99% efficiency. The baghouse exhaust is recirculated into the dust handling system.
- (f) Two (2) natural gas fired grain dryers, DR41 and DR43, each equipped with an integral self-cleaning screen and rated at 40 million BTU per hour, installed in May 1981, exhausted through Stack DR41/43.

- (g) One (1) open-grain storage pile, with a maximum capacity of 750,000 bushels.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.

A.4 FESOP Applicability [326 IAC 2-8-2]

This source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM) and volatile organic compounds (VOCs), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable;
- (2) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two-hundred and fifty (250) tons per twelve (12) consecutive month period.
- (3) The potential to emit volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
- (4) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (5) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: System #1

A grain elevator, capacity: 120 tons of grains per hour, consisting of:

- (a) Two (2) truck dumps, one (1) rail car dump, and one (1) rail loadout, all referred to as System #1, controlled by baghouse DS61 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 61.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"

- (a) fugitive emissions from truck unloading operations shall be limited to 5% opacity.
- (b) fugitive emissions from railcar unloading operations shall be limited to 5% opacity.
- (c) fugitive emissions from railcar loading operations shall be limited to 5% opacity.
- (d) nonfugitive emissions shall be limited to 0.01 gr/dscf and 0% opacity.

For an air flow rate of 42,000 actual cubic feet per minute, this condition will limit particulate emissions to 3.60 pounds per hour.

D.1.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

- (a) The PM emissions from System #1 exhausted through Stack DS 61 shall not exceed 3.60 pounds of PM per hour.
- (b) The PM₁₀ emissions from System #1 exhausted through Stack DS 61 shall not exceed 3.60 pounds of PM₁₀ per hour.
- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.2.2, D.3.2, D.4.2, D.5.2, D.6.1 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

For a process weight rate of 120 tons per hour, the equation states an emission limit of 53.1 pounds of particulate matter per hour.

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and control devices.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.6 Control Device Required for Particulate Matter (PM)

The control device for PM control shall be in operation at all times when the facility is in operation.

D.1.7 Visible Emissions Notations

- (a) Daily visible emission notations of the stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are "normal" or "abnormal."
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the control device at least once weekly when the facility is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the control device shall be maintained within the range of 1.0 and 5.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure drop shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.1.9 Control Device Inspections

An inspection shall be performed of the control device as outlined in the preventive maintenance plan, but not less than once every six (6) months. All defective parts shall be repaired or replaced as necessary.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.10 Record Keeping Requirements

- (b) To document compliance, the Permittee shall maintain a log of daily visible emission observations, weekly pressure gage readings, operation and preventive maintenance logs (including work purchases orders), and those additional inspections prescribed by the Preventative Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the period being reported.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: System #2

- (b) Leg intakes (#L-30, L-31, L-33, L-34 & L-35), conveyor intake (#BC-226), conveyor intake & discharge (#BC-204), conveyor intake (#BC-225) & discharge (#BC-205), and conveyor intake (#BC-203), all referred to as System #2, controlled by baghouse DS62 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 62.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"

emissions shall be limited to 0.01 gr/dscf and 0% opacity.

For an air flow rate of 28,000 actual cubic feet per minute, this condition will limit particulate emissions to 2.40 pounds per hour.

D.2.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

- (a) The PM emissions from System #2 exhausted through Stack DS 62 shall not exceed 2.40 pounds of PM per hour.
- (b) The PM₁₀ emissions from System #2 exhausted through Stack DS 62 shall not exceed 2.40 pounds of PM₁₀ per hour.
- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.3.2, D.4.2, D.5.2, D.6.1 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

D.2.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

For a process weight rate of 120 tons per hour, the equation states an emission limit of 53.1 pounds of particulate matter per hour.

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and control devices.

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Method 9 for opacity, or other methods as approved by the Commissioner. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.6 Control Device Required for Particulate Matter (PM)

The control device for PM control shall be in operation at all times when the facility is in operation.

D.2.7 Visible Emissions Notations

- (a) Daily visible emission notations of the stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are "normal" or "abnormal."
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.2.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the control device at least once weekly when the facility is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the control device shall be maintained within the range of 1.0 and 5.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.2.9 Control Device Inspections

An inspection shall be performed of the control device as outlined in the preventive maintenance plan, but not less than once every six (6) months. All defective parts shall be repaired or replaced as necessary.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.10 Record Keeping Requirements

- (b) To document compliance, the Permittee shall maintain a log of daily visible emission observations, weekly pressure gage readings, operation and preventive maintenance logs

(including work purchases orders), and those additional inspections prescribed by the Preventative Maintenance Plan.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.11 Reporting Requirements

A quarterly summary of the information to document compliance shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the period being reported.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: System #3

- (c) Leg elevator intake (#L-32), distributor heads (#TH-1, TH-3, TH-8 & TH-9), conveyors to silo (#BC-208 & #BC-209), conveyor to steel bin (#BC-213), three (3) surge hoppers, and weigh hopper (#S-14), all referred to as System #3, controlled by baghouse DS63 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 63.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"

emissions shall be limited to 0.01 gr/dscf and 0% opacity.

For an air flow rate of 21,000 actual cubic feet per minute, this condition will limit particulate emissions to 1.79 pounds per hour.

D.3.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

- (a) The PM emissions from System #3 exhausted through Stack DS 63 shall not exceed 1.79 pounds of PM per hour.
- (b) The PM₁₀ emissions from System #3 exhausted through Stack DS 63 shall not exceed 1.79 pounds of PM₁₀ per hour.
- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.2.2, D.4.2, D.5.2, D.6.1 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

D.3.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

For a process weight rate of 120 tons per hour, the equation states an emission limit of 53.1 pounds of particulate matter per hour.

D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and control devices.

Compliance Determination Requirements

D.3.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Method 9 for opacity, or other methods as approved by the Commissioner. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.3.6 Control Device Required for Particulate Matter (PM)

The control device for PM control shall be in operation at all times when the facility is in operation.

D.3.7 Visible Emissions Notations

- (a) Daily visible emission notations of the stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are "normal" or "abnormal."
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.3.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the control device at least once weekly when the facility is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the control device shall be maintained within the range of 1.0 and 5.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.3.9 Control Device Inspections

An inspection shall be performed of the control device as outlined in the preventive maintenance plan, but not less than once every six (6) months. All defective parts shall be repaired or replaced as necessary.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.10 Record Keeping Requirements

- (a) To document compliance, the Permittee shall maintain a log of daily visible emission observations, weekly pressure gage readings, operation and preventive maintenance logs (including work purchases orders), and those additional inspections prescribed by the Preventative Maintenance Plan.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.11 Reporting Requirements

A quarterly summary of the information to document compliance shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the period being reported.

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: System #4

- (d) The Peco loading system and ship loading, all referred to as System #4, controlled by baghouse DS65 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 65.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"

- (a) fugitive emissions from barge and ship loading operations shall be limited to 20% opacity.
- (b) nonfugitive emissions shall be limited to 0.01 gr/dscf and 0% opacity.

For an air flow rate of 19,000 actual cubic feet per minute, this condition will limit particulate emissions to 1.62 pounds per hour.

D.4.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2][326 IAC 2-8-4]

- (a) The PM emissions from System #4 exhausted through Stack DS 65 shall not exceed 1.62 pounds of PM per hour.
- (b) The PM₁₀ emissions from System #4 exhausted through Stack DS 65 shall not exceed 1.62 pounds of PM₁₀ per hour.
- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.2.2, D.3.2, D.5.2, D.6.1 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

D.4.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

For a process weight rate of 120 tons per hour, the equation states an emission limit of 53.1 pounds of particulate matter per hour.

D.4.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and control devices.

Compliance Determination Requirements

D.4.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Method 9 for opacity, or other methods as approved by the Commissioner. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.4.6 Control Device Required for Particulate Matter (PM)

The control device for PM control shall be in operation at all times when the facility is in operation.

D.4.7 Visible Emissions Notations

- (a) Daily visible emission notations of the stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are "normal" or "abnormal."
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.4.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the control device at least once weekly when the facility is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the control device shall be maintained within the range of 1.0 and 5.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.4.9 Control Device Inspections

An inspection shall be performed of the control device as outlined in the preventive maintenance plan, but not less than once every six (6) months. All defective parts shall be repaired or replaced as necessary.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.4.10 Record Keeping Requirements

- (b) To document compliance, the Permittee shall maintain a log of daily visible emission observations, weekly pressure gage readings, operation and preventive maintenance logs

(including work purchases orders), and those additional inspections prescribed by the Preventative Maintenance Plan.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.11 Reporting Requirements

A quarterly summary of the information to document compliance shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the period being reported.

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: System #5

- (e) Pneumatic dust handling system, referred to as System #5, controlled by baghouse DS64 rated at 99.99% efficiency. The baghouse exhaust is re-circulated into the dust handling system.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.5.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"

emissions shall be limited to 0.01 gr/dscf and 0% opacity.

For a system with no air flow to the outside atmosphere, this condition will limit particulate emissions to 0 pounds per hour. This facility will be considered in compliance provided the exhaust from the control device is recirculated to the dust handling system in a closed loop. Compliance with this condition will establish compliance with Operation Permit 64-07-89-0187, and render the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, not applicable.

D.5.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

- (a) The PM emissions from System #5, a closed loop system with no emissions to the atmosphere, shall not exceed 0.000 pounds of PM per hour.
- (b) The PM₁₀ emissions from System #5, a closed loop system with no emissions to the atmosphere, shall not exceed 0.000 pounds of PM₁₀ per hour.
- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.2.2, D.3.2, D.4.2, D.6.1 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

Compliance Determination Requirements

There are no applicable compliance determination requirements specifically for this emission unit.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

There are no applicable compliance monitoring requirements specifically for this emission unit.

Intentionally Left Blank

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Grain Dryers DR41 and DR43

- (f) Two (2) natural gas fired grain dryers, DR41 and DR43, each equipped with an integral self-cleaning screen and rated at 40 million BTU per hour, installed in May 1981, exhausted through Stack DR41/43.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.6.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) The two (2) natural gas fired grain dryers, DR41 and DR43, shall be limited to 5,000,000 bushels of grain dried per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The PM emissions from two (2) grain dryers including combustion exhausted through Stack DR41/43 shall not exceed 0.014 pounds of PM per bushel, equivalent to thirty five (35) tons per year.
- (c) The PM₁₀ emissions from two (2) grain dryers including combustion exhausted through Stack DR41/43 shall not exceed 0.014 pounds of PM₁₀ per bushel, equivalent to thirty five (35) tons per year.
- (d) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.2.2, D.3.2, D.4.2, D.5.2 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

D.6.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

For a process weight rate of 120 tons per hour, the equation states an emission limit of 53.1 pounds of particulate matter per hour.

D.6.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their self cleaning screens.

Compliance Determination Requirements

There are no applicable compliance determination requirements specifically for this emission unit.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.6.4 Self Cleaning Screen Required for Particulate Matter (PM)

The self cleaning screen for PM control shall be in operation at all times when the corresponding facility is in operation.

D.6.5 Visible Emissions Notations

- (a) Visible emission notations of the self cleaning screen stack exhaust DR41/43 shall be performed during normal daylight operations once per shift when exhausting to the atmosphere. A trained employee shall record whether emissions are "normal" or "abnormal."
- (b) Visible emission notations of the self cleaning screen shall be performed during normal daylight operations once per shift. A trained employee shall record whether emissions are "normal" or "abnormal. "
- (c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (d) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (e) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (f) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.6.6 Self Cleaning Screens Inspections

An inspection shall be performed of the self cleaning screens as outlined in the preventive maintenance plan, but not less than once every six (6) months. All defective parts shall be repaired or replaced as necessary.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.6.7 Record Keeping Requirements

- (a) Records shall be made and kept of the total bushels of grain dried per calendar month from these facilities.
- (b) To document compliance, the Permittee shall maintain a log of once per shift visible emission observations, operation and preventive maintenance logs (including work purchases orders), and those additional inspections prescribed by the Preventative Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.6.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the period being reported.

SECTION D.7

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Open Grain Storage Pile

One (1) open grain storage pile with a maximum capacity of 750,000 bushels.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.7.1 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

- (a) The PM emissions from open grain storage pile shall not exceed 2.15 tons of PM per year.
- (b) The PM₁₀ emissions from open grain storage pile shall not exceed 1.04 tons of PM₁₀ per year.
- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.2.2, D.3.2, D.4.2, D.5.2 and D.6.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

Compliance Determination Requirements

D.7.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.7.3 Record Keeping Requirements

The Permittee is not required to keep records on this facility by this permit.

D.7.4 Reporting Requirements

The Permittee is not required to submit reports on this facility by this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Cargill AgHorizons
Source Address: Burns Waterway Harbor, Portage, IN 46368
Mailing Address: 6640 Ship Drive, Port of Indiana, Portage, IN 46368
Permit No.: 127-11201-00025

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Cargill AgHorizons
Source Address: Burns Waterway Harbor, Portage, IN 46368
Mailing Address: 6640 Ship Drive, Port of Indiana, Portage, IN 46368
Permit No.: 127-11201-00025

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2

- 9** 1. This is an emergency as defined in 326 IAC 2-7-1(12)
CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
- 9** 2. This is a deviation, reportable per 326 IAC 2-8-4(3)(C)
CThe Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Cargill AgHorizons
Source Address: Burns Waterway Harbor, Portage, IN 46368
Mailing Address: 6640 Ship Drive, Port of Indiana, Portage, IN 46368
Permit No.: 127-11201-00025

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (eg. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Cargill AgHorizons
Source Address: Burns Waterway Harbor, Portage, IN 46368
Mailing Address: 6640 Ship Drive, Port of Indiana, Portage, IN 46368
FESOP Permit No.: 127-11201-00025
Facilities: Two (2) Grain Dryers
Parameter: Grain Dried
Limit: 5,000,000 bushels of grain (corn, wheat or soybeans) dried per twelve (12) consecutive month period with compliance determined at the end of each month, equivalent to thirty five (35) tons of PM per year and thirty five (35) tons of PM₁₀ per year.

Months: _____ to _____ Year: _____

Month	Grain Dried (bushels)	Grain Dried (bushels)	Grain Dried (bushels)
	This Month	Previous 11 Months	12 Month Total

- 9 No deviation from the limit occurred in this quarter.
- 9 Deviations occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP)

Source Name:	Cargill AgHorizons
Source Location:	Burns Waterway Harbor, Portage, Indiana 46368
County:	Porter
SIC Code:	5153
Operation Permit No.:	F 127-11201-00025
Significant Permit Revision No.:	SPR 127-16957-00025
Permit Reviewer:	Mark L. Kramer

On May 14, 2003, the Office of Air Quality (OAQ) had a notice published in the Times, Munster, Indiana, stating that Cargill AgHorizons had applied for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP) to change the name of the source from Cargill, Inc. to Cargill AgHorizons, reduce the throughput limitation of the two (2) grain dryers, DR41 and DR43, from 29.5 to 5.0 million bushels of grain per year, increase the limited PM and PM₁₀ emissions from 24.78 to 35.0 tons of PM and PM₁₀ per year, eliminate the requirements of Subpart DD for the grain dryers since their mesh size is exempt from the requirements of this rule, delete the performance testing requirement for the two (2) grain dryers due to the reduction in the throughput limitation, change the existing emission unit-specific PM and PM₁₀ annual emission limits, change the overall source-wide PM and PM₁₀ emission limits to less than one hundred (100) tons per year, restore the PM grain loading limitation of 0.01 grains per dry standard cubic foot of exhaust air pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD), Standards of Performance for Grain Elevators for certain emission units, and delete compliance determination and monitoring requirements for the pneumatic dust handling system, referred to as System #5, controlled by baghouse DS64, since the baghouse exhaust is re-circulated into the dust handling system.

The notice also stated that OAQ proposed to issue a Significant Permit Revision to a FESOP for this operation and provided information on how the public could review the proposed Significant Permit Revision to a FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Permit Revision to a FESOP should be issued as proposed.

Upon further review, the OAQ has decided to make the following changes to the FESOP Revision. The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

Change 1:

The plant ID number in the header of the permit has been corrected as follows: 127-16957-~~00094~~
00025.

Change 2:

In the description of the emission unit in Condition A.2(b) and in Section D.2, the "&" has been deleted as initially indicated in the Technical Support Document, as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This source consists of the following emission units and pollution control devices:

- (b) Leg intakes (#L-30, L-31, L-33, L-34 & L-35), conveyor intake (#BC-226), conveyor intake & discharge (#BC-204), conveyor intake (#BC-225), & discharge (#BC-205), and conveyor intake (#BC-203), all referred to as System #2, controlled by baghouse DS62 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 62.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: System #2

- (b) Leg intakes (#L-30, L-31, L-33, L-34 & L-35), conveyor intake (#BC-226), conveyor intake & discharge (#BC-204), conveyor intake (#BC-225), & discharge (#BC-205), and conveyor intake (#BC-203), all referred to as System #2, controlled by baghouse DS62 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 62.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Change 3:

Condition D.5.1 has had the last sentence deleted as initially stated in the Technical Support Document as follows:

D.5.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"

emissions shall be limited to 0.01 gr/dscf and 0% opacity.

For a system with no air flow to the outside atmosphere, this condition will limit particulate emissions to 0 pounds per hour. This facility will be considered in compliance provided the exhaust from the control device is recirculated to the dust handling system in a closed loop. ~~Compliance with this condition will establish compliance with Operation Permit 64-07-89-0187, and render the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, not applicable.~~

Change 4:

Conditions A.2(f), D.6.1(b) and (c), D.6.5(a) as well as Section D.6 have been revised to clarify that Stack DR41/43 is actually two (2) separate stacks (Stacks DR41 and DR43) as follows. The two (2) stack configuration has been confirmed by the source.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This source consists of the following emission units and pollution control devices:

- (f) Two (2) natural gas fired grain dryers, DR41 and DR43, each equipped with an integral self-cleaning screen and rated at 40 million BTU per hour, installed in May 1981, exhausted through Stacks DR41/43 and DR43.

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Grain Dryers DR41 and DR43

- (f) Two (2) natural gas fired grain dryers, DR41 and DR43, each equipped with an integral self-cleaning screen and rated at 40 million BTU per hour, installed in May 1981, exhausted through Stacks ~~DR41/43~~ and **DR43**.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.6.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) The two (2) natural gas fired grain dryers, DR41 and DR43, shall be limited to 5,000,000 bushels of grain dried per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The PM emissions from two (2) grain dryers including combustion exhausted through Stacks ~~DR41/43~~ and **DR43** shall not exceed 0.014 pounds of PM per bushel, equivalent to thirty five (35) tons per year.
- (c) The PM₁₀ emissions from two (2) grain dryers including combustion exhausted through Stacks ~~DR41/43~~ and **DR43** shall not exceed 0.014 pounds of PM₁₀ per bushel, equivalent to thirty five (35) tons per year.
- (d) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.2.2, D.3.2, D.4.2, D.5.2 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

D.6.5 Visible Emissions Notations

- (a) Visible emission notations of the self cleaning screen stack exhausts ~~DR41/~~ and **DR43** shall be performed during normal daylight operations once per shift when exhausting to the atmosphere. A trained employee shall record whether emissions are "normal" or "abnormal."

Change 5:

Condition D.6.9 has been renumbered to Condition D.6.8 as follows:

D.6.89 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.6.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the period being reported.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	Cargill AgHorizons
Source Location:	Burns Waterway Harbor, Portage, Indiana 46368
County:	Porter
SIC Code:	5153
Operation Permit No.:	F 127-11201-00025
Operation Permit Issuance Date:	July 7, 2000
Significant Permit Revision No.:	SPR 127-16957-00025
Permit Reviewer:	Mark L. Kramer

The Office of Air Quality (OAQ) has reviewed a significant permit revision application from Cargill AgHorizons, formerly Cargill, Inc., relating to the operation of the following emission units and pollution control devices:

- (a) Two (2) truck dumps, one (1) rail car dump, and one (1) rail loadout, all referred to as System #1, controlled by baghouse DS61, rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 61.
- (b) Leg intakes (#L-30, L-31, L-33, L-34 & L-35), conveyor intake (#BC-226), conveyor intake & discharge (#BC-204), conveyor intake (#BC-225), discharge (#BC-205), and conveyor intake (#BC-203), all referred to as System #2, controlled by baghouse DS62 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 62.
- (c) Leg elevator intake (#L-32), distributor heads (#TH-1, TH-3, TH-8 & TH-9), conveyors to silo (#BC-208 & #BC-209), conveyor to steel bin (#BC-213), three (3) surge hoppers, and weigh hopper (#S-14), all referred to as System #3, controlled by baghouse DS63 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 63.
- (d) The Peco loading system and ship loading, all referred to as System #4, controlled by baghouse DS65 rated at 99.99% efficiency, installed in May 1981, exhausted through Stack DS 65.
- (e) Pneumatic dust handling system, referred to as System #5, controlled by baghouse DS64 rated at 99.99% efficiency. The baghouse exhaust is re-circulated into the dust handling system.
- (f) Two (2) natural gas fired grain dryers, DR41 and DR43, each equipped with an integral self-cleaning screen and rated at 40 million BTU per hour, installed in May 1981, exhausted through Stack DR41/43.
- (g) One (1) open-grain storage pile, with a maximum capacity of 750,000 bushels.

History

Cargill, Inc. was issued a FESOP on July 6, 2000 and an application for a significant permit revision was received on December 23, 2002 requesting the following revisions:

- (a) Change the name of the source from Cargill, Inc. to Cargill AgHorizons.
- (b) Reduce the throughput limitation of the two (2) grain dryers, DR41 and DR43, from 29.5 to 5.0 million bushels of grain per year equivalent to an emission reduction from 24.78 to 4.20 tons of PM per year based on 56 pounds per bushel and a reduction to 4.500 tons of PM per year based on 60 pounds of wheat per bushel. Also since the mesh size of the dryers is 61.6 as stated on Form PI-12 of the application, the dryers should not be subject to the requirements of New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators." Subsequently, on February 14, 2003, the source requested to increase the emissions limitation for the two (2) grain dryers with a throughput of 5.0 million bushels of grain per year from 24.78 to 35.0 tons of PM and PM₁₀ per year.
- (c) Delete the performance testing requirement for the two (2) grain dryers due to the reduction in the throughput limitation and the increase in allowable emissions in (b).
- (d) Replace the existing emission unit-specific PM and PM₁₀ annual emission limits with an overall PM and PM₁₀ emission limits of ninety-nine (99) tons per year. The CP issued on August 29, 1979 limited PM emissions to 50 tons per year from the entire source. The 50-ton per year source limit was incorporated into the August 4, 1981 operation permit by limiting the PM emissions from the grain dryers to a total of twenty-five (25) tons per year, limiting PM emissions from Systems #1 and #4 to a total of twenty (20) tons per year and limiting PM emissions from Systems #2 and #3 to a total of two (2) tons per year.

The fifty (50) ton per year source-wide PM limitation was set artificially low under an obsolete provision of the superseded 1978 PSD regulations. That former PSD provision allowed a source to accept a limitation of less than 50 tons per year to render the strict PSD requirements not applicable. However, the 1978 PSD program was replaced by the August 7, 1980 rules that allowed a source to accept an emission limitation of less than one hundred (100) tons per year or two hundred and fifty (250) tons per year.

- (e) Restore the PM grain loading limitation of 0.01 grains per dry standard cubic foot of exhaust air pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD), Standards of Performance for Grain Elevators. In F 127-11201-00025, issued July 7, 2000, Condition D.1.1 limited PM emissions from Systems #1 and #4 to 0.0088 grains per dry standard cubic foot and Condition D.4.1 limited PM emissions from Systems #2 and #3 to 0.001 grains per dry standard cubic foot. These grain loading limits for Systems #1 and #4 as well as Systems #2 and #3 are equivalent to the twenty (20.0) and two (2.0) ton per year PM emission limits contained in the 1981 operation permits and are more restrictive than NSPS Subpart DD requirements.
- (f) Revise the frequency of the visible emissions notation monitoring from once per day to once per week because Cargill, Inc. has not recorded any abnormal visible emissions notations since the issuance of their FESOP on July 7, 2000.
- (g) Delete Section D.5 for the pneumatic dust handling system, DR41 and DR43, referred to as System #5, controlled by baghouse DS64. The baghouse exhaust is re-circulated into the dust handling system and therefore System #5 should have no applicable requirements

- (h) Correct two (2) other stack heights have been updated based on the information contained in Form GSD-04 submitted with this application. Since this information is only contained in the Technical Support Document and not in the FESOP, this request has been incorporated into the following table:

Stack ID	Operation	Height (feet)	Dimensions (feet)	Flow Rate (acfm)	Temperature (°F)
DS 61	truck / rail receiving System #1	25	4 x 3	42,000	ambient
DS 62	product handling System #2	25 18	4 x 3	28,000	ambient
DS 63	product handling System #3	120	4 x 3	21,000	ambient
DS 65	barge loadout System #4	30 50	1 x 2	19,000	ambient
DR 41/43	grain dryers	75	60 x 9	300,000	180

- (i) Delete Condition D.7.1 because the fugitive emissions are already covered in Section C.

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the self cleaning screens be considered as an integral part of the dryers:

The self cleaning screens are part of the process and is not an add on control.

IDEM, OAQ has evaluated the justifications and agreed that the air pollution control equipment will be considered as an integral part of the dryers. Therefore, the permitting level will be determined using the potential to emit after the self cleaning screens. Operating conditions in the proposed permit will specify that these self cleaning screens shall operate at all times when the dryers are in operation.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 23, 2002. Additional information was received on February 14, March 13, and April 23, 2003.

Emission Calculations

See pages 1 - 3 of 3 of Appendix A of this document for the revised emissions calculations due to the change of the throughput limit from 29.5 to 5.0 million bushels of grain per year and limiting the

grain loading to 0.01 grains per dry standard cubic foot of exhaust air pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD), Standards of Performance for Grain Elevators.

Potential To Emit of Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls for information purposes only since this revision does not change the potential to emit any of the regulated pollutants and was abstracted from the TSD for the F 127-11201-00025, issued July 7, 2000.

Pollutant	Potential To Emit (tons/year)
PM	509
PM ₁₀	509
SO ₂	0.210
VOC	1.93
CO	29.4
NO _x	35.0

HAPs	Potential To Emit (tons/year)
Benzene	0.0007
Dichlorobenzene	0.0004
Formaldehyde	0.026
Hexane	0.631
Toluene	0.001
Lead Compounds	0.0002
Cadmium Compounds	0.0004
Chromium Compounds	0.0005
Manganese Compounds	0.0001
Nickel Compounds	0.0007
TOTAL	0.661

Justification for Revision

The FESOP is being revised through a FESOP Significant Permit Revision. This revision is being performed pursuant to 326 IAC 2-8-11.1(f)(1) since the revision can not be performed as a minor permit revision or an administrative amendment because the source is revising and increasing emission limits to render the requirements of 326 IAC 2-2 and 326 IAC 2-7 not applicable as well as correcting and

increasing the grain loading limits to conform with those specified by NSPS Subpart DD.

County Attainment Status

The source is located in Porter County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	nonattainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Porter County has been designated as nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Porter County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Although this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, the applicable New Source Performance Standard, Subpart DD, was in effect as of August 3, 1978, prior to August 7, 1980, and therefore, the fugitive PM emissions are counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	4.6
PM ₁₀	4.6
SO ₂	0.210
VOC	1.93
CO	29.4
NO _x	35.0

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon Technical Support Document for F 127-11201-000025, issued on July 7, 2000

Potential to Emit of Revision After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. Since no new control devices are being added, the control equipment is already considered federally enforceable.

Proposed Revision	Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
DS61, System #1	15.8	15.8	-	-	-	-	-
DS62, System #2	10.5	10.5	-	-	-	-	-
DS63, System #3	7.88	7.88	-	-	-	-	-
DS65, System #4	7.13	7.13	-	-	-	-	-
DS #64, System # 5	0.000	0.000	-	-	-	-	-
DR41 & DR43, Grain Dryers	35.0	35.0	0.210	1.93	29.4	35.0	0.661
Storage Pile (Fugitive)	2.15	1.04	-	-	-	-	-
Total	78.5	77.4	0.210	1.93	29.4	35.0	0.661
PSD or Offset Threshold Level	250	250	250	25	250	250	-
FESOP Threshold Level	-	100	100	25	100	100	10/25

- (a) This revision to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.
- (b) This revision to an existing minor stationary source is not major because the emission increase is less than the Emission Offset threshold levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.
- (c) The two (2) grain dryers have a throughput limit of 5 million bushels of grain per twelve (12) consecutive month period with compliance determined at the end of each month, therefore, the requirements of 326 IAC 2-2 are not applicable and this limit also satisfies the requirements of 326 IAC 2-8-4.

This revision to the existing FESOP will **not** change the status of this stationary source because the emissions from the entire source will still be limited to less than the Part 70 major source thresholds.

Federal Rule Applicability

- (a) This source is subject to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators" because the source has truck, rail and ship loading and unloading facilities at a grain storage elevator located at a wheat and/or wet/dry corn mill with a permanent grain storage capacity of one (1) million or more bushels.
 - (1) This rule limits the opacity as follows from:
 - (A) Grain handling operations, including bucket elevators or legs, to 0% opacity,
 - (B) Fugitive truck unloading, railcar unloading, and railcar loading operations to 5% opacity,
 - (C) Fugitive emissions from truck loading operations to 10% opacity, and
 - (D) Fugitive ship and barge loading operations to 20% opacity.
 - (2) This rule also limits PM emissions from grain handling operations to 0.01 grains per dry standard cubic foot of outlet air or less, except grain dryers.
- (b) Pursuant to 40 CFR 60.302, the two (2) grain dryers are not subject to the requirements of the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) because the rack dryers' gasses exhaust through screen filters finer (61 mesh) than 50 mesh.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this proposed revision.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is still a minor source under PSD and Emission Offset. It is not 1 of the 28 listed source categories. The potential to emit after controls and limits of all attainment pollutants are less than two hundred and fifty (250) tons per year and similarly the potential to emit VOC is less than twenty-five (25) tons per year.

The source has requested a source-wide emission limit of ninety-nine (99) tons of PM₁₀ per year to render the requirements of 326 IAC 2-2 and 326 IAC 2-7 not applicable. Note that Systems #1 through #5 are also limited by the allowable PM grain loading specified by NSPS Subpart DD. The allowable grain loading with an associated flow rate and exhaust temperature equate to an allowable PM emission rate.

IDEM, OAQ requires that compliance with any emission rates be verifiable and as such an overall source-wide emission limit can be specified only if each individual emission unit has its own emission limits.

The source has suggested specific hourly emission limitations upon request. Fugitive emissions do count toward PSD determination because the effective date of NSPS Subpart DD of August 3, 1978 predates the August 7, 1980 date and they also count for Part 70 applicability. The fugitive emission from the storage piles therefore have been included. The hourly emission rates have been

incorporated into the revision as hourly PM and PM₁₀ emission limits or emission factors in pounds per bushel to render the requirements of 326 IAC 2-7 and 326 IAC 2-2 not applicable.

Proposed Revision	Potential to Emit After Controls (tons/year)		Potential to Emit After Controls With Limits Requested by the Source (tons/year)	
	PM	PM ₁₀	PM	PM ₁₀
Process/facility				
DS61, System #1	15.8	15.8	15.8	15.8
DS62, System #2	10.5	10.5	10.5	10.5
DS63, System #3	7.88	7.88	7.88	7.88
DS65, System #4	7.13	7.13	7.13	7.13
DS #64, System # 5	0.000	0.000	0.000	0.000
DR41 & DR43, Grain Dryers	31.5	7.88	35.0	35.0
Storage Pile (Fugitive)	2.15	1.04	2.15	1.04
Total	75.0	50.2	78.5	77.4

Note that pursuant to OP 64-07-89-0188, particulate matter was limited to less than twenty-five (25) tons per year to render the requirements of 326 IAC 2-2 and 40 CFR 52.21 not applicable. The fifty (50) ton per year source-wide limit was incorporated into the August 4, 1981 operation permit by limiting the PM emissions from the grain dryers to a total of twenty-five (25) tons per year, limiting PM emissions from Systems #1 and #4 to a total of twenty (20) tons per year and limiting PM emissions from Systems #2 and #3 to a total of two (2) tons per year.

The fifty (50) ton per year source-wide PM limitation was set artificially low under an obsolete provision of the superceded 1978 PSD regulations. That former PSD provision allowed a source to accept a limitation of less than fifty (50) tons per year to render the strict PSD requirements not applicable. However, the 1978 PSD program was replaced by the August 7, 1980 rules that allowed a source to accept an emission limitation of less than one hundred (100) tons per year or two hundred and fifty (250) tons per year. Thus, as requested by the source these aforementioned PM limitations have been deleted and replaced by the above PM and PM₁₀ emission limitations to render the requirements of 326 IAC 2-2 and 326 IAC 2-7 not applicable to the entire source.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

The grain dryers are subject to 326 IAC 6-3-2. Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), particulate matter (PM) emissions shall be limited by the following equation for process weight rates greater than sixty thousand (60,000) pounds per hour:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

For a process weight rate of 120 tons per hour, the equation states an emission limit of 53.1 pounds of particulate matter per hour. The control equipment shall be in operation at all times the facility is in operation, in order to comply with this limit.

The particulate from the grain dryers shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour. This limitation is based upon the following:

The baghouse DS62 shall be in operation at all times the grain dryers are in operation, in order to comply with this limit.

Compliance Requirements

The request to change the frequency of the visible emissions notations for the System #1 through System #4 and the two (2) grain dryers from once per day to once per week can not be accommodated since IDEM, OAQ has determined that once per week is not sufficient to ensure continuous compliance with 326 IAC 2-8-4 and NSPS, Subpart DD.

As a result of this request, the IDEM, OAQ inspector discussed the operation of the grain dryers with plant personnel and recommended that visible emission notations be made once per shift of the self-cleaning screens.

Testing Requirements

The request to delete the performance testing requirements for the two (2) grain dryers has been granted since both dryers are not subject to the requirements of Subpart DD and therefore opacity testing is no longer required. In addition, the throughput limit has been significantly reduced from 29,500,000 to 5,000,000 bushels per twelve (12) consecutive month period, a reduction of 83.1%. Although the limited, allowable PM emission rate has been increased from 24.78 to 35.0 tons per year, or an increase of 41.2%, the potential to emit PM with the Fires 6.23 emission factor of 3 pounds per ton of grain combined with the limited throughput of 5,000,000 bushels per year and a control efficiency of 98% for the self-cleaning screens yields 4.50 tons of PM per year.

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in bold):

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

Cargill AgHorizons, Inc.
Burns Waterway Harbor
Portage, IN 46368

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This source consists of the following emission units and pollution control devices:

A grain elevator consisting of:

- (a) Two **(2)** truck dumps, one **(1)** rail car dump, and one **(1)** rail loadout, all referred to as System #1, controlled by baghouse DS61 rated at 99.99% efficiency, **installed in May 1981, exhausted through Stack DS 61.**

- (b) Leg intakes (#L-30, L-31, L-33, L-34 & L-35), conveyor intake (#BC-226), conveyor intake & discharge (#BC-204), conveyor intake (#BC-225), & discharge (#BC-205), **and** conveyor intake (#BC-203), all referred to as System #2, controlled by baghouse DS62 rated at 99.99% efficiency, **installed in May 1981, exhausted through Stack DS 62.**
- (c) Leg elevator intake (#L-32), distributor heads (#TH-1, TH-3, TH-8 & TH-9), conveyors to silo (#BC-208 & #BC-209), conveyor to steel bin (#BC-213), three **(3)** surge hoppers, **and** weigh hopper (#S-14), all referred to as System #3, controlled by baghouse DS63 rated at 99.99% efficiency, **installed in May 1981, exhausted through Stack DS 63.**
- (d) The Peco loading system and ship loading, all referred to as System #4, controlled by baghouse DS65 rated at 99.99% efficiency, **installed in May 1981, exhausted through Stack DS 65.**
- (e) Pneumatic dust handling system, ~~DR41 and DR43~~, referred to as System #5, controlled by baghouse DS64 rated at 99.99% efficiency. The baghouse exhaust is re-circulated into the dust handling system.
- (f) Two (2) natural gas fired grain dryers, DR41 and DR43, each **equipped with an integral self-cleaning screen and** rated at 40 million BTU per hour, **installed in May 1981, with particulate emissions controlled by an internal cyclone and filter bed rated at 98.0% efficiency exhausted through Stack DR41/43.**
- (g) One **(1)** open-grain storage pile, with a maximum capacity of 750,000 bushels.

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant, **except particulate matter (PM) and volatile organic compounds (VOCs)**, from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. **This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offset) not applicable;**
 - (2) **Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two-hundred and fifty (250) tons per twelve (12) consecutive month period.**
 - (43) The potential to emit volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
 - (24) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

- (35) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: **System #1**

- (a) Two (2) truck dumps, one (1) rail car dump, and one (1) rail loadout, all referred to as System #1, controlled by baghouse DS61 rated at 99.99% efficiency, **installed in May 1981, exhausted through Stack DS 61.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"

- (a) fugitive emissions from truck unloading operations shall be limited to 5% opacity.
- (b) fugitive emissions from railcar unloading operations shall be limited to 5% opacity.
- (c) fugitive emissions from railcar loading operations shall be limited to 5% opacity.
- (d) nonfugitive emissions shall be limited to **0.01** ~~0-0088~~ gr/dscf and 0% opacity.

For an air flow rate of 42,000 actual cubic feet per minute, this condition will limit particulate emissions to **3.60** ~~3.15~~ pounds per hour. ~~Compliance with this condition will establish compliance with Operation Permit 64-07-89-0186, which limits particulate emissions from this facility and System #4 to 20 tons per year. Compliance with this condition will also render the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, not applicable.~~

D.1.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

- (a) The PM emissions from System #1 exhausted through Stack DS 61 shall not exceed 3.60 pounds of PM per hour.
- (b) The PM₁₀ emissions from System #1 exhausted through Stack DS 61 shall not exceed 3.60 pounds of PM₁₀ per hour.
- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.2.2, D.3.2, D.4.2, D.5.2, D.6.1 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326

IAC 2-8-4 for PM₁₀.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: **System #2**

- (b) Leg intakes (#L-30, L-31, L-33, L-34 & L-35), conveyor intake (#BC-226), conveyor intake & discharge (#BC-204), conveyor intake (#BC-225), & discharge (#BC-205), **and** conveyor intake (#BC-203), all referred to as System #2, controlled by baghouse DS62 rated at 99.99% efficiency, **installed in May 1981, exhausted through Stack DS 62.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"

- (a) emissions shall be limited to **0.01** ~~0.004~~ gr/dscf and 0% opacity.

For an air flow rate of 28,000 actual cubic feet per minute, this condition will limit particulate emissions to **2.40** ~~0.24~~ pounds per hour. ~~Compliance with this condition will establish compliance with Operation Permit 64-07-89-0187, which limits particulate emissions from this facility and System #3 to 2 tons per year. Compliance with this condition will also render the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, not applicable.~~

D.2.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

- (a) The PM emissions from System #2 exhausted through Stack DS 62 shall not exceed 2.40 pounds of PM per hour.
- (b) The PM₁₀ emissions from System #2 exhausted through Stack DS 62 shall not exceed 2.40 pounds of PM₁₀ per hour.
- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.3.2, D.4.2, D.5.2, D.6.1 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: **System #3**

- (c) Leg elevator intake (#L-32), distributor heads (#TH-1, TH-3, TH-8 & TH-9), conveyors to silo (#BC-208 & #BC-209), conveyor to steel bin (#BC-213), three **(3)** surge hoppers, **and** weigh hopper (#S-14), all referred to as System #3, controlled by baghouse DS63 rated at 99.99% efficiency, **installed in May 1981, exhausted through Stack DS 63.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"

- (a) emissions shall be limited to **0.01** ~~0.004~~ gr/dscf and 0% opacity.

For an air flow rate of 21,000 actual cubic feet per minute, this condition will limit particulate emissions to **1.79** ~~0.18~~ pounds per hour. ~~Compliance with this condition will establish compliance with Operation Permit 64-07-89-0187, which limits particulate emissions from this facility and System #2 to 20 tons per year. Compliance with this condition will also render the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, not applicable.~~

D.3.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

- (a) The PM emissions from System #3 exhausted through Stack DS 63 shall not exceed 1.79 pounds of PM per hour.
- (b) The PM₁₀ emissions from System #3 exhausted through Stack DS 63 shall not exceed 1.79 pounds of PM₁₀ per hour.
- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.2.2, D.4.2, D.5.2, D.6.1 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: **System #4**

- (d) The Peco loading system and ship loading, all referred to as System #4, controlled by baghouse DS65 rated at 99.99% efficiency, **installed in May 1981, exhausted through Stack DS 65.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"

- (a) fugitive emissions from barge and ship loading operations shall be limited to 20% opacity.
- (b) nonfugitive emissions shall be limited to **0.01** ~~0.0088~~ gr/dscf and 0% opacity.

For an air flow rate of 19,000 actual cubic feet per minute, this condition will limit particulate emissions to **1.62** ~~1.42~~ pounds per hour. ~~Compliance with this condition will establish compliance with Operation Permit 64-07-89-0186, which limits particulate emissions from this facility and System #1 to 20 tons per year. Compliance with this condition will also render the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, not applicable.~~

D.4.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2][326 IAC 2-8-4]

- (a) The PM emissions from System #4 exhausted through Stack DS 65 shall not exceed 1.62 pounds of PM per hour.
- (b) The PM₁₀ emissions from System #4 exhausted through Stack DS 65 shall not exceed 1.62 pounds of PM₁₀ per hour.
- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.2.2, D.3.2, D.5.2, D.6.1 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: **System #5**

- (e) Pneumatic dust handling system, ~~DR41 and DR43~~, referred to as System #5, controlled by baghouse DS64 rated at 99.99% efficiency. The baghouse exhaust is re-circulated into the dust handling system.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.5.1 326 IAC 12 (40 CFR 60.302, Subpart DD)

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"

- (a) emissions shall be limited to **0.01** ~~0.004~~ gr/dscf and 0% opacity.

For a system with no air flow to the outside atmosphere, this condition will limit particulate emissions to 0 pounds per hour. This facility will be considered in compliance provided the exhaust from the control device is re-circulated to the dust handling system in a closed loop. ~~Compliance with this condition will establish compliance with Operation Permit 64-07-89-0187, and render the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2, not applicable.~~

D.5.2 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

- (a) The PM emissions from System #5, a closed loop system with no emissions to the atmosphere, shall not exceed 0.000 pounds of PM per hour.
- (b) The PM₁₀ emissions from System #5, a closed loop system with no emissions to the atmosphere, shall not exceed 0.000 pounds of PM₁₀ per hour.
- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.2.2, D.3.2, D.4.2, D.6.1 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

~~D.5.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]~~

~~Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions shall not exceed the pound per hour~~

emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

For a process weight rate of 120 tons per hour, the equation states an emission limit of 53.1 pounds of particulate matter per hour.

D.5.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and control devices.

Compliance Determination Requirements

D.5.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

There are no applicable compliance determination requirements specifically for this emission unit.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.5.5 Control Device Required for Particulate Matter (PM)

The control device for PM control shall be in operation at all times when the facility is in operation. Furthermore, the exhaust from the control device shall be recirculated to the dust handling system in a closed loop.

D.5.6 Control Device Inspections

An inspection shall be performed of the control device as outlined in the preventive maintenance plan, but not less than once every six (6) months. All defective parts shall be repaired or replaced as necessary.

There are no applicable compliance monitoring requirements specifically for this emission unit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.5.7 Record Keeping Requirements

(b) To document compliance, the Permittee shall maintain a log of operation and preventive maintenance logs (including work purchases orders), and those additional inspections prescribed by the Preventative Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.8 Reporting Requirements

A quarterly summary of the information to document compliance shall be submitted to the address

~~listed in Section C – General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the period being reported.~~

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: **Grain Dryers DR41 and DR43**

- (f) Two (2) natural gas fired grain dryers, DR41 and DR43, each **equipped with an integral self-cleaning screen and** rated at 40 million BTU per hour, **installed in May 1981, with particulate emissions controlled by an internal cyclone and filter bed rated at 98.0% efficiency exhausted through Stack DR41/43.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

~~D.6.1 326 IAC 12 (40 CFR 60.302, Subpart DD)~~

~~Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.300, Subpart DD) "Standards of Performance for Grain Elevators:"~~

- ~~(a) emissions from grain dryers shall be limited to 0% opacity.~~

D.6.12 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) **The two (2) natural gas fired grain dryers, DR41 and DR43, This facility shall be limited to 5,000,000 29,500,000 bushels of grain dried per twelve (12) consecutive month period, with compliance determined at the end of each month. based on a monthly rolling total. This limit will establish compliance with Operation Permit 64-07-89-0188, by limiting particulate emissions below 25 tons per year. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements will not apply.**
- (b) **The PM emissions from two (2) grain dryers including combustion exhausted through Stack DR41/43 shall not exceed 0.014 pounds of PM per bushel, equivalent to thirty five (35) tons per year.**
- (c) **The PM₁₀ emissions from two (2) grain dryers including combustion exhausted through Stack DR41/43 shall not exceed 0.014 pounds of PM₁₀ per bushel, equivalent to thirty five (35) tons per year.**
- (d) **Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.2.2, D.3.2, D.4.2, D.5.2 and D.7.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.**

~~D.6.23 Particulate Matter (PM) [326 IAC 6-3-2(c)]~~

~~Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions shall not exceed the pound per hour emission rate established as E in the following formula:~~

~~Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:~~

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

For a process weight rate of 120 tons per hour, the equation states an emission limit of 53.1 pounds of particulate matter per hour.

D.6.34 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~these facilities~~ and **their self cleaning screens control devices**.

Compliance Determination Requirements

~~D.6.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]~~

~~During the period between 30 and 36 months after issuance of the FESOP, the Permittee shall perform testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for the internal cyclone and filter bed PM to establish the pressure drop range that correspond to 98% control efficiency and Method 9 for opacity, or other methods as approved by the Commissioner. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.~~

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.6.46 Self Cleaning Screen Control Device Required for Particulate Matter (PM)

The **self cleaning screen** control device for PM control shall be in operation at all times when the **corresponding** facility is in operation.

D.6.57 Visible Emissions Notations

- (a) ~~Daily~~ Visible emission notations of the **self cleaning screen** stack exhaust **DR41/43** shall be performed during normal daylight operations **once per shift** when exhausting to the atmosphere. A trained employee shall record whether emissions are "normal" or "abnormal."
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.6.8 Parametric Monitoring

~~The Permittee shall record the total static pressure drop across the control device at least once weekly when the facility is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the control device shall be maintained within the range of 2.5 and 4.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.~~

~~The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and shall be calibrated at least once every six (6) months.~~

D.6.69 Self Cleaning Screens Control Device Inspections

An inspection shall be performed of the **self cleaning screens** control device as outlined in the preventive maintenance plan, but not less than once every six (6) months. All defective parts shall be repaired or replaced as necessary.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.6.740 Record Keeping Requirements

- (a) Records shall be made and kept of the total bushels of grain dried per calendar month from ~~these facilities~~.
- (b) To document compliance, the Permittee shall maintain a log of ~~daily~~ **once per shift** visible emission observations, ~~weekly pressure gauge readings~~, operation and preventive maintenance logs (including work purchases orders), and those additional inspections prescribed by the Preventative Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.844 Reporting Requirements

A quarterly summary of the information to document compliance **with Condition D.6.1(a)** shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the period being reported.

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Open Grain Storage Pile

One **(1)** open grain storage pile with a maximum capacity of 750,000 bushels.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.7.1 Fugitive Dust Emissions [326 IAC 6-4]

~~As previously stated in Section C of this permit, the Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.~~

D.7.1 PM and PM₁₀ Emission Limitations [326 IAC 2-2] [326 IAC 2-8-4]

- (a) The PM emissions from open grain storage pile shall not exceed 2.15 tons of PM per year.
- (b) The PM₁₀ emissions from open grain storage pile shall not exceed 1.04 tons of PM₁₀ per year.

- (c) Compliance with these PM and PM₁₀ emission limitations combined with those specified in Conditions D.1.2, D.2.2, D.3.2, D.4.2, D.5.2 and D.6.1 renders the requirements of 326 IAC 2-2 not applicable and also satisfies the requirements of 326 IAC 2-8-4 for PM₁₀.

Compliance Determination Requirements

D.7.23 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.7.34 Record Keeping Requirements

The Permittee is not required to keep records on this facility by this permit.

D.7.45 Reporting Requirements

The Permittee is not required to submit reports on this facility by this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION

Source Name: Cargill **AgHorizons, Inc.**

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: Cargill **AgHorizons, Inc.**

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: Cargill ~~AgHorizons, Inc.~~

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FESOP ~~Part 70~~ Quarterly Report

Source Name: Cargill ~~AgHorizons, Inc.~~
Source Address: Burns Waterway Harbor, Portage, IN 46368
Mailing Address: 6640 Ship Drive, Port of Indiana, Portage, IN 46368
~~Part 70~~ FESOP Permit No.: 127-11201-00025
Facilities: **Two (2)** Grain Dryers
Parameter: Grain Dried
Limit: **5,000,000** ~~29,500,000~~ bushels of grain (corn, wheat or soybeans) dried per **twelve (12) consecutive** ~~month~~ month period **with compliance determined at the end of each month, equivalent to thirty five (35) tons of PM per year and thirty five (35) tons of PM₁₀ per year.**

Months: _____ to _____ Year: _____

Month	Grain Dried (bushels) Column 1	Grain Dried (bushels) Column 2	Grain Dried (bushels) Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

Conclusion

The operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 127-16957-00025.

Company Name: Cargill AgHorizons
Address City IN Zip: Burns Waterway, Portage, IN 46368
FESOP Revision: 127-16957
Plt ID: 127-00025
Reviewer: Mark L. Kramer
Date: December 23, 2002

The following calculations determine the potential to emit based on limits imposed by 40 CFR 60.302

DS61	System #1:	Truck unloading / rail unloading							
0.01 grain *	42000 acf *	528 deg. R	*(100 -	0) % moisture *	525600 min *	1 lb *	1 ton =	15.77	ton/yr
dscf	min *	(460 +	68) deg. R *	100 % moisture *	year	7000 grain	2000 lb		
DS62	System #2:								
0.01 grain *	28000 acf *	528 deg. R	*(100 -	0) % moisture *	525600 min *	1 lb *	1 ton =	10.51	ton/yr
dscf	min *	(460 +	68) deg. R *	100 % moisture *	year	7000 grain	2000 lb		
DS63	System #3								
0.01 grain *	21000 acf *	528 deg. R	*(100 -	0) % moisture *	525600 min *	1 lb *	1 ton =	7.88	ton/yr
dscf	min *	(460 +	68) deg. R *	100 % moisture *	year	7000 grain	2000 lb		
DS65	System #4:	PECO loading system / ship loading							
0.01 grain *	19000 acf *	528 deg. R	*(100 -	0) % moisture *	525600 min *	1 lb *	1 ton =	7.13	ton/yr
dscf	min *	(460 +	68) deg. R *	100 % moisture *	year	7000 grain	2000 lb		
DR41/DR43	Grain Dryers								
120 tons/hr*	3 lb PM/ton grain *	2.00% emitted	8760 hrs/yr	=	31.54	ton PM/yr		31.536	ton/yr
	2000 lb/ton								
Total:								72.8	ton/yr
120 tons/hr*	0.75 lb PM-10/ton grain *	2.00% emitted	8760 hrs/yr	=	7.884	ton PM-10/yr		7.884	ton/yr
	2000 lb/ton								
Total:								49.2	ton/yr

PM and PM-10 emission factors from Fires v 6.23 SCC3-02-005-28

F 127-11201 limited PM emissions from grain drying to less than 24.78 tons per year.

This PM emission limit is based on a throughput limit of 29.5 million bushels per year at 56 lbs/bushel.

29500000 bushel/yr *	3 lb PM/ton grain *	2% emitted	56 lb/bushel	=	24.78	ton PM/yr
	2000 lb/ton *	2000 lb/ton =				

The revised throughput limit for the two (2) grain dryers will be 5.0 million bushels per year at 60 lbs of wheat /bushel.

5000000 bushel/yr *	3 lb PM/ton grain *	2.00% emitted	60 lb/bushel	=	4.500	ton PM/yr
	2000 lb/ton *	2000 lb/ton =				
5000000 bushel/yr *	0.75 lb PM-10/ton grain *	2.00% emitted	60 lb/bushel	=	1.125	ton PM-10/yr
	2000 lb/ton *	2000 lb/ton =				

The following emission limits would be needed to comply with previous permit conditions:

DS61	System #1:								
0.01 grain *	42000 acf *	528 deg. R	*(100 -	0) % moisture *	525600 min *	1 lb *	1 ton =	15.77	ton/yr
dscf	min *	(460 +	68) deg. R *	100 % moisture *	year	7000 grain	2000 lb		
DS62	System #2:								
0.01 grain *	28000 acf *	528 deg. R	*(100 -	0) % moisture *	525600 min *	1 lb *	1 ton =	10.51	ton/yr
dscf	min *	(460 +	68) deg. R *	100 % moisture *	year	7000 grain	2000 lb		
DS63	System #3								
0.01 grain *	21000 acf *	528 deg. R	*(100 -	0) % moisture *	525600 min *	1 lb *	1 ton =	7.88	ton/yr
dscf	min *	(460 +	68) deg. R *	100 % moisture *	year	7000 grain	2000 lb		
DS65	System #4:								
0.01 grain *	19000 acf *	528 deg. R	*(100 -	0) % moisture *	525600 min *	1 lb *	1 ton =	7.13	ton/yr
dscf	min *	(460 +	68) deg. R *	100 % moisture *	year	7000 grain	2000 lb		
DR41/DR43	Grain Dryers	increased to 35 TPY of PM & PM-10 at 5 million bushel throughput or 0.140 lbs/bushel							35.00 ton/yr
PM & PM-10 Total:								76.3	ton/yr